



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,557	09/30/2003	Terry L. Schneider	7784-000553CPC	6819
27572	7590	08/21/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			DIXON, MERRICK L	
		ART UNIT	PAPER NUMBER	
		1774		

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/675,557	SCHNEIDER, TERRY L.
	Examiner	Art Unit
	Merrick Dixon	1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 June 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



MERRICK DIXON
PRIMARY EXAMINER

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

1

The examiner notes applicants' corrections as relating to tradename Nitinol.

However, it is noted claims 15-17,23,25 and 26 also includes similar problems.

2

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3

Claims 1,5-14,18-22,24,27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xie et al(US 6503620) in view of Japanese reference 6-36613(Abstract). The primary reference teaches the basic claimed invention including an adhesive compound and a plurality of fillers/particles therein- col 2, line 41- col 3, line 4; col 4, lines 47-56; col 5, lines 47-57; col 6, lines 3-11; col 7, lines 31-46; col 16, line 55 – col 17, line 7. Although the reference teaches particles in its adhesive material, it fails to expressly teach that such particles are SMA. The secondary reference to Japanese 6-36613, teaches that it is known in the art to include sma particles in similar resin as taught by the primary reference- see abstract. It would have been obvious to one of ordinary skill in the art at the time the invention is made to combine the teaching of the secondary reference and include such particles in the primary reference motivated by the desire to impart desired characteristics to the adhesive resin. See the primary reference, col 7, lines 3-10. See secondary reference (0009); lines 3-8. Concerning claims 5,20 and 27, the primary reference teaches shapes in col 7, lines 1-3. Concerning claims 7,8,18,19,28 and 29, the primary reference teaches similar sma amounts in col 5, lines 47-57. Concerning claims 11-13 and 24, the cited reference teaches similar

Art Unit: 1774

claimed dimensions in col 6, lines 3-11. Concerning claims 6,14 and 21, the primary reference teaches similar particle disposition in its resin in col 7, lines 35-40. It is further submitted that the particles would indeed be also and randomly distributed in the resin by virtue of its incorporation therein in and in the absence of unexpected results. Concerning claims 9 , 10 and 22, the primary reference teaches adhesive film and paste material in col 8, lines 40-54; col 7, lines 41-46, respectively.

4

Claims 2,15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xie et al(US 6503620) and Japanese reference 6-36613(Abstract) as applied to claims 1,5-14,18-22,24,27-29 above, and further in view of Goldstein(US 4657822). The reference to Goldstein teaches it is known in the art to include NITINOL alloy particles in products as taught by the obvious combined teachings of the references as discussed above - col 4, line 35.

5

Claims 3,4,16,17,25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over over Xie et al(US 6503620) and Japanese reference 6-36613(Abstract) as applied to claims 1,5-14,18-22,24,27-29 above, and further in view of Minners(US 6236300). The Minners patent teaches that it is well known in the art for sma material to exist in various phrases - col 3, lines 14-50; col 1, lines 34-42. The secondary reference accordingly teaches that it is known to attach material with SMA included therein to substrate in, with no adverse affects - col 6, lines 42-46.

6

Applicant's arguments filed 6-7-06 have been fully considered but they are not persuasive. Applicants argue that .the primary reference has no need to include

Art Unit: 1774

sma particles in its tape product. The examiner disagrees and points applicant to section (0009) of the secondary reference. such inclusion would vastly improve the primary reference's product by proving, among many properties, elasticity to the tape(0016). Applicants further argue that the sma particles are not in the bonding material.. the examiner disagrees. The secondary reference product is a "bonding material". The secondary reference teaches particles therein-(0007);(0013),(0021). Applicants further argue that the examiner employed hindsight in the proposed combinations.. to this the examiner reminds applicants that any judgement on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicants' disclosure, such a reconstruction is proper. *In re McLaughlin*, 443 F2.2d 1392; 170 USPQ 209(CCPA 1971). Applicants further argue in regards to the rejection of claims 2,3,4,15,16,17,23,25,26 that the rejection regarding to same claims are improper based on the argument advance above relating to rejection of claims 1,5-14,18-22,24, and 27-29. the examiner maintains the rejections for reasons articulated in the previous office action and including reasons as set forth above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8

Applicants who wish to send a facsimile (draft copies) for the examiner's immediate review can do so by using the Examiner's personal fax number at 571-273-1520. The faxing of all papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 (November 15, 1989). **NOTE: All facsimiles sent to the examiner's personal fax number should be in draft-forms and will be treated as informal. Same facsimiles will not be entered in the related applications unless otherwise agreed and noted by the examiner.**

The fax number for all other facsimile is 571-273-8300.

Information about **the status of an application** may be obtained from the Patent Information Retrieval system (**Private PAIR**).

Art Unit: 1774

Status inquires for **published applications** may be retrieved from either **Private PAIR** or **Public PAIR**. Questions about the PAIR system should be directed to the Electronic Business Center at **866-217-9197**.

Any questions concerning the instant communication should be directed to Examiner Dixon, at 571-272-1520, Mondays, Wednesdays and Thursdays, between 12 noon and 8 PM, eastern time .



Merrick Dixon

Art unit 1774

571-272-1520